



Who is Audubon International?

Our Mission: To deliver high-quality environmental education and to facilitate the sustainable management of land, water, wildlife, and other natural resources in all places people live, work, and play.





Options for Conserving & Enhancing Natural Resources:

- Regulatory, "command-and-control" approaches
 - Federal, state and local laws and regulations
 - Government regulatory and land-management agencies
 - Public land acquisition
 - Public funding for conservation (i.e., grants)
- Voluntary, "incentive-based" approaches
 - Non-profit, Charitable, Mission-based
 - Financial/tax incentives
 - Education
 - Voluntary industry standards
 - Environmental certification



Audubon International Programs

Engage members to:

- Develop appreciation
- Foster planning
- Create a path
- Motivate action





In the end, we will conserve only what we love, we will love only what we understand. We will understand only what we are taught.

-Baba Didum



Where We Work



Audubon International positively impacts environmental health at *multiple geographic scales*, including individual properties, neighborhoods, communities, and ecoregions.



Our Environmental Certification

- Audubon Cooperative Sanctuary
 - Existing property-scale facilities and developments including golf course, schools, businesses, ski areas, etc.
- Audubon Signature & Classic Program
 - Planned property-scale facilities and developments
 - Redesigned facilities and developments
- Audubon Green Lodging Program
 - Existing hotels, resorts and other lodging facilities
- Audubon Sustainable Communities Program
 - Existing municipalities, private communities, lake associations, universities, etc.



Golf numbers in the US...

- National Average 12% Registration
- Leading States in Registration Totals:
 - Florida, California, Illinois, New York, Texas
- Leading States in Percent Registration:
 - Delaware, New Jersey, Colorado,
 Connecticut, Illinois, Maryland, Mass.,
 Oregon
- Leading States in Certification (Percentage):
 - Oregon, Colorado, Wyoming, Florida, New Jersey





Audubon Cooperative Sanctuary System

- Audubon Cooperative Sanctuary Program for:
 - Golf Courses
 - Ski Areas
 - Schools
 - Businesses
- Audubon Signature Sanctuary Program
- The goal of each program is educating and assisting land managers in practicing good environmental stewardship and sustainable land management.





Living Laboratory









Golf & the Environment

AI assists golf courses in becoming a valuable part of our conservation landscape, while building support for more eco-friendly golf.





Benefits of the Program

The Audubon Cooperative Sanctuary Program:

- provides a framework for coordinating and expanding your environmental efforts.
- will help you document, communicate, and promote what you do.
- will help you reduce risks and environmental liabilities.

How the ACSP works...

PLAN	Complete a Site Assessment and Environmental Plan
DO	Implement your Environmental Plan
CHECK	Gauge your results and apply for certification
ACT	Strive for continuous improvement



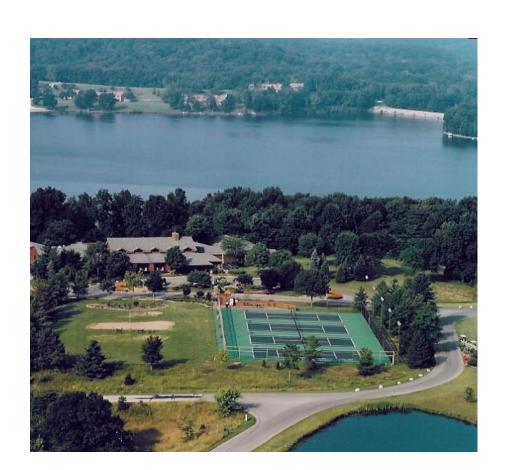
6 Environmental Focus Areas for Certification in ACSP Golf

- Site Assessment & Environmental Planning
- Wildlife and Habitat Management
- Chemical Use Reduction and Safety
- Water Conservation
- Water Quality Management
- Outreach and Education



Environmental Planning takes into account:

- Buildings
- Landscaping
- Lawns
- Water features
- Irrigation
- Existing natural areas
- Maintenance facility





Environmental Planning: Example





Wildlife and Habitat Management

- Protect, enhance, and expand native habitats and species
- Provide habitat for variety of wildlife in non-play and landscaped areas







Wildlife and Habitat Management: Example

"Many golfers that are
used to manicured turf
may not like the look of naturalized areas
or they may be concerned about slow play,
unwanted wildlife, or deer ticks. I was
faced with all these concerns and
educating the membership through
newsletters and the course bulletin board
led to general acceptance of
naturalization."

-- Paul Dotti, Superintendent



Edgewood Country Club, River Vale, NJ



Chemical Use Reduction and Safety

- Maintain optimal turfgrass health through sound cultural practices and Integrated Pest Management (IPM) techniques
- Minimize harmful environmental impacts and risks associated with chemical storage and application







At Schuyler Meadows Country Club, NY **Superintendent Peter** Salinetti reduced pesticide use by more than 50% by spot-treating problem areas. The club reduced fertilizer use by 60% by converting fairways from *Poa annua* to bentgrass

Chemical Use Reduction & Safety: Example



Schuyler Meadows Country Club, Loudonville, NY



Water Conservation

- Maintain irrigation equipment for maximum efficiency and minimal water waste
- Maintain soil and turf health to maximize water absorption and minimize water loss due to evaporation and runoff
- Reduce water consumption
- In some cases, reduce irrigated turf acreage







Water Quality Management

- Employ Best Management Practices or structural controls near all water features to minimize potential for chemical runoff, nutrient loading, and drift
- Monitor health of water features











Outreach and Education

- Target Audience:
 - Golfers
 - Staff
 - Community Members
- Goals:
 - Educate what, where, and why
 - Communicate foster understanding and support
 - Involve encourage participation in stewardship projects





Signature & Classic Programs

The **Signature Program** is an environmental education and conservation assistance program created to help landowners and managers follow comprehensive sustainable resource management principles when developing and managing properties. The **Classic Program** has the same rigor, but focuses on properties being redeveloped or going through restoration for improvement, while maintaining the same use.



Signature Member Granite Bay Golf Club, CA



Signature & Classic Program Steps

- Initial Site Assessment- An on-site assessment is conducted by Audubon International staff of the natural resources that the property has to offer and how those resources may be impacted by the development project.
- Natural Resource Management Plan (NRMP) -The plan serves as a guide for the
 construction and management of the property focusing on wildlife management,
 habitat enhancement, waste management, energy efficiency, water quality and
 conservation, and integrated pest management.
- Implementation- To become certified, a project must implement the NRMP, meet the
 minimum certification standards and site-specific requirements set forth by Audubon
 International, and pass an on-site environmental audit. Site visits are conducted by
 Audubon International staff during the major phases of the project to supplement
 training and education of construction and operational personnel as well as consulting
 staff.

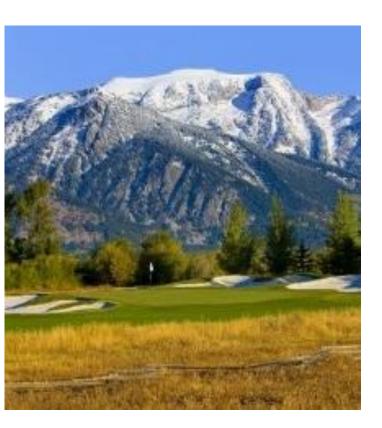


Signature Program Steps cont.

- Environmental Audit- An on-site Environmental Audit by Audubon International staff will assess compliance with program and site-specific requirements for long-term management in accordance with Signature Program standards.
- Recertification- Demonstrating continued maintenance of program criteria, implementation of the NRMP, and Outreach and Education activities are necessary for recertification. Projects will host a site visit from a member of a local environmental group on year three after the Environmental Audit.
- Subsequent site-audits are conducted every third year by Audubon International staff.



Results: Operations



Jackson Hole Golf Club, WY

ACSP Participant Survey results:

- 80% decreased the amount of managed turfgrass
- 56% increased the width of "no-spray zones" around water features
- 99% reported that turf quality has remained the same or improved



Good for the Environment

- ACSP Participant Survey results:
 - 75% reduce pesticide costs
 - 82% reduced pesticide use
 - 89% improved control methods, decreasing chemical use
 - 89% conscientiously choose native plants when landscaping
 - 50% increased the amount of shoreline vegetation
 - 99% reported that turf quality has remained the same or improved



Contact Information:

Nancy Richardson Director of Signature and Classic Programs Henderson, KY

270-869-9419

Nancy@auduboninternational.org

www.auduboninternational.org







